West Virginia Chemical Leak Site (A3XK)
Scope of Work for Services from the EPA Environmental Response Team (ERT)

Prepared by OSC JKelly 02/14/14

Background: This work is requested of ERT in response to a request from the West Virginia Department of Environmental Protection (WVDEP) for air sampling technical support at the West Virginia Chemical Leak Site. In addition, it is warranted in light of EPA Region 3's decision that efforts to develop an air sample analytical method for the chemical 4-methylcyclohexanemethanol (MCHM) is both prudent and precautionary due to evolving site issues. Chemists with ERT and the Central Regional Laboratory have indicated that a tube media sampling method may work best in light of the chemical's properties and the timeframe available for method derivation. ERT has indicated they have the capability to develop a method in a short time frame before planned cleanup activities commence at the site that may result in airborne release of the chemical.

Scope of Work (SOW):

1. Spike the chemical onto carbon tubes and/or XAD tubes and extract with the appropriate solvent to determine compound recovery.
2. Analyze using GC/MS in the Selective Ion Monitoring (SIM) mode or another procedure determined to be promising based on experimentation.
3. Calculate results and perform an initial calibration. Add calibration standards to the initial calibration, if feasible.
5. Conduct a desorption efficiency after the most appropriate tube media has been identified.
6. Perform a demonstration of capability to assess method performance.
7. Conduct a method detection limit study to ensure that the low point on the calibration is feasible.
8. Identify and perform appropriate QA/QC requirements.
9. Provide results and an outline of the procedures followed to the OSC. This documentation will be reviewed by staff at EPA Region 3's Central Regional Laboratory and potentially other EPA chemists before any decision is made to collect field samples. Sample collection may depend on the results of efforts underway to identify preliminary occupational or public health screening values.

Personnel and Cost:

ERT's Raj Singhvi will coordinate development of the analytical method. Ex. 4 - CBI chemists employed by ERT's contractor Lockheed-Martin Inc. will be performing much of the work outlined in the SOW. Calculation of the approximate cost:

Contractor chemist = Ex. 4 - CBI

Ex. 4 - CBI	$11,000